



# MAESTRO

## D1.4 Workshop Executive summary M39

Version 2

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## 2 Executive Summary

A series of Go to Market workshops were conducted in each of the MAESTRO pilot countries; Ireland, Luxembourg, Switzerland and Italy. The Primary objective of these workshops was to discuss the MAESTRO platform with a selection of potential customers (both manufacturers and assistive technology commissioners) to gauge their interest in MAESTRO, to ascertain whether it fills a gap in the market and to find out whether the participants felt MAESTRO would be a useful and usable platform and how would they envisage engaging with MAESTRO.

There were formal workshops in Luxembourg and in Switzerland. In Ireland and in Italy, a series of commercial interviews was carried out with a selection of both manufacturers and commissioners.

This pan European engagement was very useful in answering some of the commercial questions which were highlighted with the CMU in August 2018 and will ultimately inform the final Business Case which will serve as a useful input to the post-project commercial plans for MAESTRO.

The overwhelming response gathered in each of the workshops and in the commercial interviews, was that there is a gap in the market which, if successfully deployed, MAESTRO could fill.

This document will give an overview of each of the country Go to Market workshops and interview series and will conclude with the overall findings of these engagements.



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## 4 Abbreviations

Abbreviation	Definition
ADL	Activity of Daily Living
HSE	Health Service Executive, National Irish Health Service
AAL	Ambient Assisted Living

## 5 Go To Market Commercial Interviews – Ireland

### 5.1 Summary

NetwellCASALA conducted a series of one to one interviews in the month of December 2018 (M39 of the MAESTRO project) with the participants of the Irish pilot. The manufacturers that we interviewed were STATSports (large organisation), CliffRunMedia (medium sized organisation) and PacSana (start-Up). We also interviewed a number of end-user organisations including the National Health Service.

We were very fortunate to have engaged three very diverse, dynamic manufacturers of assistive technology devices across three different market segments (fitness, communications and ADL monitoring) as well as both healthcare professionals and formal caregiving organisations.

All of the interviewed had a good understanding of the MAESTRO proposition and each believed that the MAESTRO platform, if successfully launched and supported would fill a gap in the market that they currently operate in.

The interviews centred on the following questions:

<b>Questions for Manufacturers</b>	<b>Questions for Commissioners</b>
<i>Q.1 Does the MAESTRO Manufacturers Assessment Tool sound useful to you?</i>	<i>Q.1 Does the MAESTRO User Profiling Tool sound useful to you?</i>
<i>Q2. How would you envisage engaging with MAESTRO? Would you imagine having to pay a licence fee to access this service? Or a subscription fee? Or would you imagine paying for access to this service on a transactional basis?</i>	<i>Q2. How would you envisage engaging with MAESTRO? Would you imagine having to pay a licence fee to access this service? Or a subscription fee? Or would you imagine paying for access to this service on a transactional basis?</i>
<i>Q3. Does the MAESTRO consultative service seem appealing? If so, how much would you expect to pay for this level of engagement?</i>	<i>Q3. How do you think this type of service could/should be funded to ensure trust?</i>
<i>Q4. How do you think this type of service could/should be funded to ensure trust?</i>	<i>Q4. Any Additional Feedback?</i>
<i>Any Additional Feedback?</i>	



Each of the respondents suggested differing pricing models which will be outlined in further detail below.

## 5.2 Manufacturers Response

We interviewed the Chief Executive of each organisation. The MAESTRO project was described at the beginning of the interview. We gave an overview of the MAESTRO Assessment Framework which has been designed to support manufacturers of AAL products and services to better meet the needs of older people. The adherence to which would result in some level of accreditation. We highlighted two possible manufacturer engagements:

1. A **consultative engagement**, whereby there would be a level of consultative support in refining the product or service with the manufacturer using MAESTRO as a guideline framework. Once this development work was complete, the MAESTRO team would carry out an audit which would result in a MAESTRO accreditation, should the product or service meet the MAESTRO assessment criteria.
2. A straightforward **audit and accreditation model**, whereby the manufacturer engaged with MAESTRO to audit a product or service against the criteria outlined in the MAESTRO Manufacturers Assessment Tool.

Both models were attractive to all of the manufacturers. We had piloted the consultative process and simulated a post-trial audit with **STATSports** during the Irish Pilot phase of the project. STATSports are a leading global provider of data analytics to professional sporting organisations e.g. Liverpool FC, Barcelona FC and several major American Football teams. They felt the MAESTRO consultative service was very useful and a service for which they would be happy to pay as they felt it could open a market that they have no experience of quickly.

STATSports felt that a MAESTRO accreditation would be very beneficial and worth investing in **if** it was recognised and enhanced credibility in the market. They would pay a consultative fee for the assessment and accreditation. Their preference would be a subscription fee. They would be against a licencing model as they would have a worry around IP. Transactional fees wouldn't work as there would be thousands of transactions.

They would consider paying between €75k and €100k for the testing and accreditation. If MAESTRO provided a portal or channel to market once the product is accredited, that would be highly desirable and they would expect to pay anything between €150k and €200k to engage with this process.

**Cliffrunmedia** is an organisation which has designed a modified communications tablet aimed at older people called the ACORN Tablet. This device is currently being trialled with users throughout Ireland. We interviewed their Chief Executive, who could see a definite a gap in the market for a consultative service with an accreditation. He felt there would need to be a framework in place whereby a team of 'subject



experts' along with academics and others are brought in on a case by case basis to work through the full product and commercial development cycle. This type of service would definitely command a sizeable fee which would be dependent on the size of the enterprise.

If it were purely a standards type proposition – they would expect to pay for an audit and accreditation on a transactional basis/pay a fee for the audit. However, until the accreditation was seen as worthwhile i.e. MAESTRO was a trusted brand, they would expect that this accreditation would be granted on a voluntary/non fee paying basis until such time as critical mass was reached.

**PacSana** is a smaller start-up who is currently in the design and evaluation stage of their ADL (activity of daily living) bracelet which would act as a wearable monitor for older people. Their Chief Executive found the engagement with MAESTRO during the Irish pilot very useful as it provided good guidance around the issues/capabilities and needs of older people as they relate to the PacSana bracelet. This helped their product development process greatly. PacSana would imagine paying for this consultation on a daily rate basis and to pay for the assessment if it led to a recognised accreditation.

They would look at a 'commission-like' transactional model of on-going payment if there was a MAESTRO portal where accredited products were hosted and would expect to pay in the region of €1,000 per day for this engagement and expected the assessment and accreditation would cost in the region of €5,000.

PacSana believed that it is vital that this service is seen as impartial and therefore trustworthy. This should be factored into the brand building of the MAESTRO brand. They found the consultative feedback the most useful element of their engagement. They also thought the assessment was useful in addressing a comprehensive feature set that they may not have fully considered however it was long and arduous to fill in so would question compliance going forward.

### 5.3 Commissioners Response

We interviewed a selection of assistive technology commissioners and general formal caregivers again in a series of one to one interviews. We centred the interviews in a similar structure to the manufacturer interviews but described the proposition from the user's perspective.

All of the commissioners and caregivers we interviewed agreed that a service whereby they could access information on assistive technologies using an individual user profile which used their client's capabilities and needs to guide their search would be incredibly beneficial and would address a gap in the market they currently operate in.

We interviewed members of two different geriatric units of the **Health Service Executive** (Ireland's National Health Service) Occupational Therapy and Self-Management Reporting. Both of these respondents felt that the MAESTRO User Profiling Tool was very useful and if it were incorporated into some type of search





service which allowed them to feel confident that the assistive devices or services they were recommending were of good quality and actually fitted the needs of their client's they would be delighted to use it. However, neither respondent felt that they would pay for this service.

One of the respondents made the point that they would be concerned that this service would be difficult to maintain and keep current as devices come onto the market quickly, apps change and products get upgraded quickly and constantly. The other point she made was that as a member of the Health Service Executive, the only products she would see would be the ones approved and tendered for by the Executive, the criteria for which is generally cost, this might limit the effectiveness of the tool in this market segment.

We also interviewed **ALONE**, an NGO based in Dublin. ALONE is an organisation who supports older people suffering from loneliness. They were very enthusiastic about the MAESTRO User Profiling Tool and Platform. This type of service would greatly enhance their ability to introduce technologies to older people as they would have the confidence that the products and services they recommended were of good quality, do what they're supposed to and meet the individual needs of their client base. However, as with the HSE, they did envisage that they would have to pay to access such a service/platform. They believed that if it were impartial, it would be acceptable that the manufacturer received a commission on each product purchased via MAESTRO and that this pricing model would work.

They also impressed the need for the accreditation to come with a recognised brand in this field in order for MAESTRO to stand out from other 'comparative sites' in the market. They felt that word of mouth, particularly in this segment, would be very effective as they know the lack of guidance in this field is something many NGO's have difficulty with.

## 5.4 Conclusions and Commercial Considerations from the Irish Interviews

The month of interviews conducted in Ireland with manufacturers, commissioners and caregiving organisations was hugely informative both from their feedback on the MAESTRO Assessment Tools and Platform and from their feedback on the commercial proposition.

The overwhelming response was that there is a need for MAESTRO. Manufacturers would gladly pay to engage with a consultative service which gave them a recognised accreditation and better a recognised, impartial route to market. Commissioners really need guidance in this market, they are unsure what AAL products and services are available to support older people, moreover, they are unsure if the products they can find are of good quality, reliable and actually meet the capabilities and needs of their clients.

There were varying responses from the manufacturers in terms of a pricing model for MAESTRO engagement and a definite view from commissioners on how they would not pay to engage, despite the fact they would value MAESTRO.

There is a lot to consider in terms of market entry and branding, however it is clear from the Irish pilot and go to market interviews that there is an interest in MAESTRO which could, if launched effectively, be commercially successful.

## 6 Go to Market Workshop – Luxembourg

### 6.1 Context

In Luxembourg, the go-to-market workshop took the form of a 3 hour workshop, on Tuesday December 11<sup>th</sup>, from 4PM to 7PM in LIST premises in Belval (Esch-sur-Alzette).

We invited 22 representatives of the Luxembourgish MAESTRO ecosystem including producers of IoT solutions for the elderly, actors of the health & elderly ecosystem, health insurance, pharmacy, sale of equipment.

Considering the busy period of the end of the year, we were satisfied with the attendance of two manufacturers, one informal caregiver and the main assessor – decision maker of Luxembourg.

The workshop started with an introduction of MAESTRO project and a contextualisation of the workshop where a round table took place. It continued with a presentation of the functionalities of the platform followed for each part by questions and answers.

During the round table, several questions have been asked to the participants:

- What are the difficulties that you encounter:
  - When designing connected health object?
  - When marketing connected health object?
  - When selecting and then buying a connected health object?
  - Related to connected health objects (other ...)?

During the workshop, questions were asked in two steps:

1. After the presentation of the producer functionalities:
  - Does this service seem useful to you?
  - What need does he meet? (with the importance of the need)
  - If useful:
    - How do you plan to engage with MAESTRO?
    - What would be your contribution / your reward in terms of value?
  - Do you plan to pay to put your products on such a platform? What would you pay?
  - Do you imagine rather a monthly subscription, a right of access, a percentage of the sales?
  - What mechanism, in your opinion, would provide the necessary confidence for this platform?
2. After the presentation of the prescriber and end-user:
  - Does this service seem useful to you?
  - What need does he meet? (with the importance of the need)
  - If useful:
    - How do you plan to engage with MAESTRO?
    - What would be your contribution / your reward in terms of value?
  - Do you plan to pay to access the MAESTRO profiling tool / database of accredited products and services?

- Do you think it would be more appropriate to charge for the service by manufacturers, whose products are on the site?
- How do you think this type of service could / should be financed to ensure trust?

## 6.2 Round table and roots cause / main problem considering IoT for senior's identification

We encouraged participants to highlight their main barriers considering IoT for Senior while they were presenting themselves.

**Edward Ojo, from Actimage:** Actimage is involved in 10 different projects (AAL, H2020...)

Main issues:

- IoT senior related market moves very fast, new products come very quickly.
- They also have difficulties to drive innovation to the market. Interested on how our project is going to the market.

**Bernard Lambeaux, works at LIST but is here in his role as an informal caregiver.**

Main issues:

- How to use technology to avoid or postpone admittance to nursing homes.
- His main advice is the need of involve the senior during the design phase of the product.

**Fabiano Munisso, from ADAPTH** is the National Cluster for Design for All in Luxembourg. Also in charge of the IoT furniture for the national Dependence Insurance (deciding which IoT solution dependent people need and can be covered by the Dependence Insurance). For ADAPTH, a dependant person means seniors which do not phone or go to the bath alone anymore. The average age is 76 years old.

Main issues:

Their main problem is to have the possibility of testing products, renting is not possible so they need to buy the solution without any tests. In addition, since nobody is monitoring the real usage of the products or doing maintenance, in most of the case the (expensive) solutions are not used.

**Regis Ciré – Pharmagest/Noviatech** (large pharmaceutical group)

Regis Cire is the inventor of the Noviacare box (and founder of Noviatech which was bought by Pharmagest). The aim of this box is to monitor routine of user at home in order to detect any deviations of life style of the senior and report it to the family.

They started in 2011, with the creation of an association with seniors, formal and informal caregiver in order to know what seniors want, to test the solution and to see with health professionals what is dangerous, what is un/acceptable .... For the Go-To Market phase, they needed investors. They decided to join Pharmagest because seniors trust their pharmacists.

Noviacare will launch to the market in March 2019.

Main issues:

- Involve the senior in product design at the earliest.
- Find funding for the commercialisation phase.
- Involve the pharmacist who is the person of trust (and follow-up).
- Get closest to 100% of autonomy via assisted living.

### 6.3 Resume of questions and answers relative to IoT solutions manufacturers

The advantages of the solution for the manufacturer are plenty:

- Useful to know if products fit to clients' needs, if clients are using the product: a useful tool to assess the impact of a product on the user target.
- Allows the manufacturers to know what is new on the market, and to determine what is the value of their product compare to the competition.
- The evaluation of assessors gives a more reliable opinion than Amazon's comments.
- Allows companies to become well-known.
- MAESTRO will enforce confidence.
- MAESTRO facilitates the marketing by presenting the product for the specific target.
- MAESTRO could also provide to manufacturer needs not covered by current solution.
- MAESTRO could also provide description of the social security system of countries to ease the implementation of their solution in another country.
- The only question remaining is the possibility of selling products such as a marketplace.

### 6.4 Resume of questions and answers relative to the final user (commissioners, caregivers and seniors)

On the user side, many advantages, but they need more guaranties:

- Should be very easy and convenient, save time of research of scouting market.
- If the confidence in the MAESTRO label exists, it will be perfect but in order to reach this trust:
  - Show the scientific evidence or validation of the reliability of the device such as its Algorithm for decision-making and the evaluation methodology.
  - Publish the other users' comments in order to foster trust (even if only unhappy people publish comments, but customers are now used to this behaviour).
  - Some organisations in Luxembourg (Hellefdohem) ask for additional label (TUV: Technischer Überwachungsverein, English translation: Technical Inspection Association).
  - Assessors have to be clearly identified; association of consumers should be considered and will insure trust.

- Languages are important to be adapted for each country (and Portuguese is needed for Luxembourg).
- There is a risk of senior stigmatisation and it should be a criterion to assess.
- The financial capability of the senior should be incorporated in the profile to filter the solution fitting with him.
- Information about reimbursement of social security or health insurance would be a huge asset.
- B2B models are more adapted in Luxembourg.

## 6.5 Conclusions

Despite the small number of participants, we consider this workshop as a success.

Our group was totally representative of the senior economy ecosystem in Luxembourg and most of the participants were enthusiastic about 1 – MAESTRO solution and 2 – the discussion of Senior Technology and the Go-To Market issue.

The main outputs of the Luxembourgish Workshop are:

- Manufacturers' willingness to pay is the most important. This reinforces the MAESTRO Business Model which considers them as the main financiers of the solution. It remains now to assess the propensity to pay according to the final value delivered to them.
- Business to business model could be investigated since trust issues will be hard and long to address. A trusted platform is a long way to build.
- Some financial information should be added in the profile and in the proposition: their benefit is undivided.



## 7 Go to Market Workshop – Switzerland

### 7.1 Context

Coherent Streams held a half day workshop on Tuesday December 11<sup>th</sup>, in the Bussigny-Novotel premises in a suburb of Lausanne. They invited some 120 of French-speaking Swiss from the “MAESTRO ecosystem” (MAESTRO-related specialists and organisations). 31 persons came to physically attend the workshop. In the figure below, there is the full representation of stakeholders who participated in the workshop.

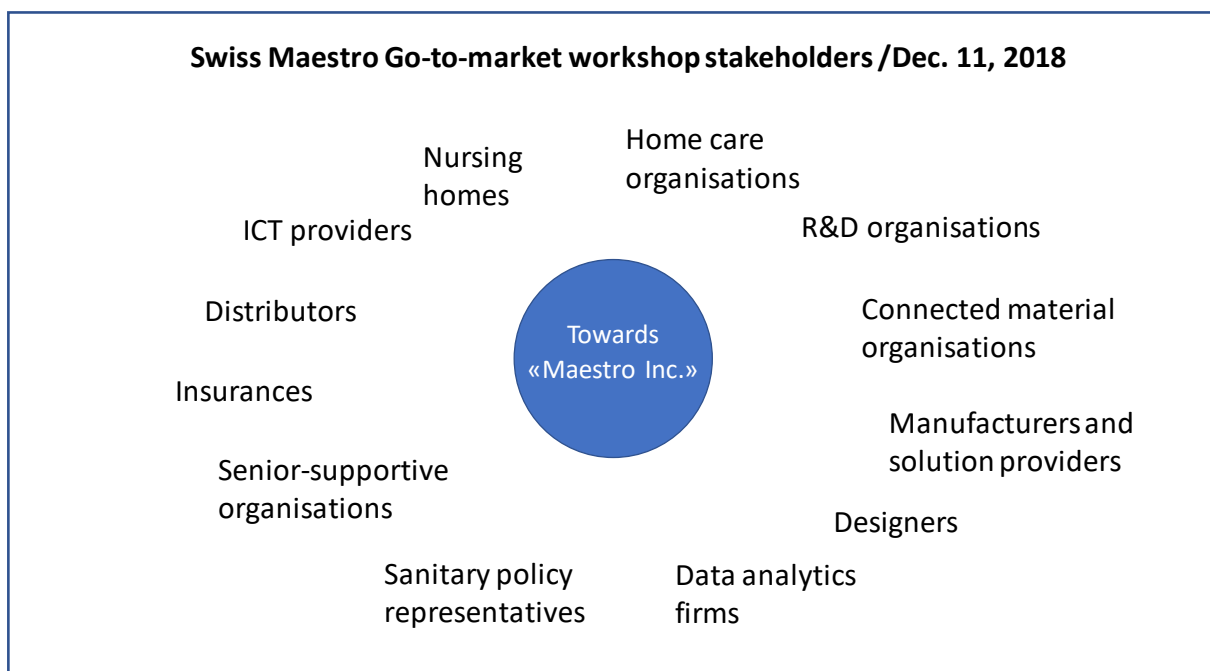


Figure 1: Categories of stakeholders who has participated in the Swiss MAESTRO Go-to-market workshop of Dec. 11, 2018

### 7.2 The programme

The workshop, after a brief introduction, was organised into two sessions:

1. A full presentation of the MAESTRO project (initial context, intention, process and inquiries, innovative achievements, state of affairs as of Dec. 2018, and next most likely steps in a commercial perspective) given by Pierre Rossel.
2. A comment-and-floor exchange period, in which the participants were asked to express their views, facilitated by Didier Lanoiselée.

A short conclusion followed, in fact not so much concluding but rather opening for commitments. This led to a series of contact requests, and a list of more than 15 concrete prospects for Coherent Streams to follow up in early 2019.

### 7.3 MAESTRO presentation

Despite having received a brief explanation along with access to the MAESTRO website, many of the attendees did not know what MAESTRO was. It was therefore necessary to present MAESTRO to all of the attendees at the beginning of the workshop so that all participants could really make relevant suggestions and comments regarding MAESTRO's future. This presentation was delivered in the local language (as was the case in all of the other country Go to Market presentations).

The MAESTRO project was presented as the 'development of a decision-making tool or aid in a confused health landscape filled with unclear connected system offers' and in the project timeframe has, in order to be simple and effective, designed:

- 1) An evaluation methodology
- 2) A database
- 3) A profiling capacity for all stakeholders (in order to understand their needs so as to facilitate relevant product match-making).

A sample of what the platform looked like as of Dec. 11, 2018 (knowing that some improvements are due shortly after that) was then displayed in two key slides:

1. A screen shot of the home page, which showed how people could register, profile themselves and find products likely to match their needs. Some initial entries were demonstrated, showing how the repository was being filled with typical products.
2. A screen shot of the assessor's desk, with two superimposed additional screen shots in the centre of the slide. The first showed a sample of products already evaluated (and therefore editable) or ready to be evaluated. The second one showed a sample of indicators and metrics used for the evaluation of the products, with clear mention of how the assessors could define specific and reusable templates (or specific sets of indicators and metrics) for the different product categories.

The main innovation feature set for MAESTRO, (some already in place, others in the pipeline) was then listed, as follows:

- A trustworthy evaluation capacity for connected systems designed for seniors' well-being and health,
- A network of labs for technology testing and measurement and a network of Living labs,
- A trust index and rating of the labs as being a most obvious step to consolidate the offer,
- A deep profiling and customisation capacity,
- A gradual database build-up open to "field" feed-backs and usage-related comments,
- GDPR compliance-and-beyond objectives,
- More than just evaluation: contributing to build what well-being and health may mean in the digital era, beyond mere assistive means and towards systematic empowerment provisions.





This list of innovative features was then completed by emphasising four different usage scenarios with which the stakeholders present could identify. This ended with what MAESTRO is today and should become tomorrow:

‘A web-based service platform which can help both the solution producers to improve their products and the professional care-givers to be able to advise, recommend and acquire the best-in-class solutions satisfying their needs or the ones of the seniors they support’.

This main commercial focus was completed by mentioning other potential clients for MAESTRO Inc: Adapted housing builders, Insurance providers, Fitness (gym) facilities, local and global product Distributors.

The last slides put the services provided by MAESTRO in the broader framework of the emerging well-being and health care landscape (for the years to come) and concluded with how MAESTRO could help build a commercial proposal for this next stage.



Figure 2: The full presentation is available on Coherent Streams website [www.coherentstreams.com](http://www.coherentstreams.com)

## 7.4 The comment and exchange session

The first comment worth making at this point is ours; during the whole afternoon, there were multiple affirmations on the key hypothesis underpinning the MAESTRO project, i.e. there was no question about the relevance of MAESTRO in its goal to bring orientation and clarification to a broad set of stakeholders. This confirmation is summarized here in two sentences:

- 1) There is a problem linked with connected systems promising well-being and health, (this is currently exacerbated by the diverse implant scandals), showing

a loss of trust in medical or 'nearly medical' offers, and also relevant to new undocumented, uncertified solutions;

- 2) There is a need for a transparent, documented and hopefully trusted evaluation of such solutions so as to provide the various stakeholders with reliable information, references and decision capacity regarding these systems.

The first group of questions, comments and concerns dealt with the issue of what happens to the typical data produced when using connected systems (an issue which also emerged strongly in the Swiss pilot).

Beyond that, we identified a need for any new players to have guarantees that the evaluators or their commercial representatives in the future will not sell the user profiles acquired during the evaluation processes, nor the data associated with them. This is in fact a broader problem, as it was not expressed as a concern on the individuals or groups who might be interested in promoting MAESTRO on the market, but related to the difficulty for any such player to be able to play on both sides of the table.

This is a complex ethical issue. Of course, MAESTRO Inc. pretenders, as Coherent Streams is, can state that all sorts of good practices will be established to prevent this problem. But it is not so simple, and GDPR compliance will not suffice. A more sophisticated inter-organisational solution will probably have to be designed to decorrelate roles, responsibilities and commitments.

Beyond the usual fear regarding uncontrolled use of data, the true issue (which was discussed at length), concerned the commercial future of MAESTRO, not its project phase. The workshop had the objective of gathering, in one single session, some 12 different stakeholders. In fact, there were two groups crossing the table:

1. Those who think of the issue from a business perspective; either those who promote and sell technology that fits in the MAESTRO perimeter or those who plan acquiring MAESTRO services to make money in their own sector (insurance, pharmacy, big health groups). Among those stakeholders, we can find those who might benefit from MAESTRO evaluations to improve their products, as well as those who could imagine benefitting from MAESTRO methodological framework to co-design and co-develop their products.
2. Those who are engaged in some way in delivering social or healthcare and who try to prevent their activity to be polluted by commercial interests. Consequently, they want the MAESTRO evaluation capacity to be exerted with the maximum independence possible as far as the vendors' interests are concerned. This group outlined two key concerns: 1) the fact that MAESTRO evaluates systems but are ready to sell those observations to the manufacturer so that he can improve his product, a claim that may hinder the reputation for independence of judgment, if no special precautions are taken, 2) the fact that an insurance company, for instance, may wish to buy results and profiles for its own sake, this problem is more easily dealt with.

In this latter group, we can distinguish, those who are daily engaged in delivering healthcare, with real seniors, and those who are more on the side of public policy, who need to be confident in the impartiality of the evaluation process or that the risk of conflict of interest that may hinder it is taken care of.

Both expressed worries that MAESTRO tries to be too interactive, in the evaluation process, with the manufacturers.

Beyond the precautionary responses that Coherent Streams presenters produced, there is undoubtedly a problem that has to be tackled seriously and probably be given not one but several answers, linked to several roles and organisations in the future.

The disentanglement of an evaluation process that needs to build trust and reputation to attract more clients needing that type of services, along with the capacity of the MAESTRO methodology to actually help improve products and eventually their producers to sell better products is a must. This is particularly the case, given its multi-organisational form, as no one can be on both sides of this ethical wall.

Another group of questions related to the spectrum of seniors, a reality which can be perceived on the MAESTRO platform and also in the usage scenarios and needs displayed in the presentation.

Some participants raised the question of whether MAESTRO was not embracing too broad a scope of ages/needs, from the young seniors looking for self-measurement, to the middle-aged seniors needing some stimulation, to the seniors approaching the last years of her/his life and who thanks to an effective activity monitoring and alerting technologies / schemes can be assisted for an optimised quality of life.

We cannot discount that MAESTRO Inc. may have to focus on some specific segments of the big Silver market, but time was too short to discuss these implications and options in depth, it will have to be done in further interactions with those interested stakeholders in attendance.

In the same spirit, one participant expressed that a fragile person is not necessarily handicapped nor sick and still be enjoying a good quality of life in spite of her/his frailty and this issue may partly collide with the need to rely on too strict categorisation ages or needs. Pierre Rossel also mentioned the H2020 European project ProACT<sup>2</sup>, in which in spite of their obvious frailty, seniors are not only supervised, but encouraged to develop a project of achievement or self-measurement and in any case of self-empowerment. This issue, confronting the need to monitor and assist seniors in their daily activity and the one of letting them space for self-achievements, is a huge incoming debate in which the possibility to give seniors extra options, beyond ensuring their security, appears to be now a key challenge. However, beyond that, the idea of the participant was also to say that if MAESTRO can address the needs of frail persons, then it is not just about seniors.

In a broader perspective, discussions were raised about the need for the professionals who have to provide care to seniors, to get the proper training in the years to come, to understand, but also to be able to make their role evolve as a complementary resource to the pervasiveness of technological supports.

The question of labs, either 1) labs equipped to test and measure materials, frequencies, resolution, resistance, etc., linked to technological claims, etc. or 2) the different types of Living Labs was also discussed, some participants being eager to



know how all these partners involved in the assessment process entered the business model, as obviously the services these labs provide have to be paid for.

Another discussion, quite expected, was the one on how and when or exactly for what type of situations and services AI could bring in the picture. Some of course stressed that AI can be more efficient than humans (and then, this raises the question of what would be the roles of humans that AI cannot surpass), others displaying some hesitant feelings on the impact of this trend in the medical field.

An example, which was discussed more in depth (quite a typical MAESTRO one), was the need for a diagnosis to be carried out upon a senior person having fallen. A lot of systems may help detect, more or less adequately, whether the senior has fallen, but with a series of issues concerning the interpretation upon what follows the fall (in what condition is really the fallen senior) and the kind of decision and action that may have to be triggered. We of course did not terminate that discussion, only observing that AI components will soon be part of MAESTRO assignments, not necessarily an easy technological brick to assess.

The final question of the business model most suitable for MAESTRO Inc. was discussed and linked to those stakeholders presented as the main commercial targets, to start with, namely the solution-producing companies.

The debate was so intense and deep, with a lot of testimonies from people clearly legitimate and relevant in the field which MAESTRO aims at dealing with, that we have been able only to touch the surface of the business plan. However, there is now a doubt on whether given the heterogeneity of interests present that afternoon we could have produced a consensus on that theme; instead, Coherent Streams is committed to re-contact and make appointments for dedicated working sessions with over 15 persons among the participants who showed an interest in MAESTRO.

In fact, the main outcome of this workshop was not a lack of conclusive answers but the fascinating surge of different openings with many of the participants. Their awareness and interest were clearly expressed, but as time was tight, further encounters appeared as the logical continuation of the workshop. With some of them, it will mean pursue the exploration of issues only barely touched during the afternoon, with others, options to explore with Coherent Streams on how to engage in further and more concrete partnerships, towards a form or another of MAESTRO Inc.

Beyond that, initial comments also surged on how this capacity, i.e. the core MAESTRO innovation, could open an avenue towards ecosystems centred more on how to stay healthy than on to repair and maintain the disabled.

At this level, it is still unclear whether MAESTRO will be most useful to characterise systems providing healthcare or if it may rather boost the wellbeing side of the equation. However, making MAESTRO capable of addressing needs ("I want to stay home as long as possible") rather than just evaluating devices or systems may be a way to go in that direction, thinking of "ecosystems" rather than only "systems", devices or components.

In all cases, it must be primarily an aid to decision, regarding seniors' needs in contexts which are likely to change to which seniors have and their care givers have to adapt.



The basic idea behind empowerment, as stressed at the end of the session, is that technology has to make us more competent in identifying, experiencing and monitoring our needs, and this concerns the seniors as well as their supportive care-givers, formal and informal.

## 7.5 Conclusions on the Swiss Workshop

Beyond taking advantage of the other Go-to-market workshops, carried out in the other countries of the MAESTRO Consortium and their promises for the future of MAESTRO in commercial terms, the workshop in Switzerland was so rich that Coherent Streams is confronted with the need to prioritise the participants' expression of interest so as to make appointments with them that may fit in the company next three months' agenda. Some of these appointments are already scheduled; many others will have to be set up during January and February 2019.

Priority will be given to those players representing the best chance for MAESTRO Inc. to emerge in the coming months, with reasonable support and chances for success. Initial results linked with these follow-up contacts will have to be discussed with the other Consortium members, and some coordination, for optimum effects, will have to be done, although the official time of the project is up.

In the meantime, in the absence of a clear regulatory framework IoT for well-being and health, for seniors or others, is a domain pursuing its prolific expansion. It evolves thanks to innovations continuously feeding established technologies, as well as a few newer ones (5G, NLP, emotion analysis, smart contracts, etc.), in between promising this somehow magic "something more" that analysts Hoffman and Novak have pointed out as being suggestively intrinsic IoT<sup>1</sup> and the real risks, for the senior persons, of losing privacy, control and capacity for individual and social assertiveness.

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<sup>1</sup> Novak, T, Hoffman, D. (2017). "Consumer Experience in the Internet of Things: Conceptual Foundations". Vienna, International Conference for Consumer Psychology, June 2015. Oxford, Oxford University Press

## 8 Go To Market Workshop – Italy

### 8.1 Method

In Italy, a number of interviews were conducted in order to get inputs from manufacturers and their point of view regarding the potential of MAESTRO considering their specific business interests and market fields.

Three company representatives were contacted and interviewed both face-to-face and through skype calls. All of them were device developers and/or service providers in the sector of wellbeing and/or research on wellbeing.

The interviews were supported by a slide presentation and started with an introduction of the MAESTRO project and a contextualisation of the meeting. It continued with a presentation of the functionalities of the platform and presented the interface from the point of view of the three different stakeholders: older person/caregiver, manufacturer/solution provider and evaluator. The final part was dedicated to a discussion with the following questions as a guide:

Questions referred to the company for a self-description:

- In which field does your company operate?
- What kind of solutions are you dealing with?
- Do you usually rely on standard certification?
- Through which mechanisms/channels do you promote your solutions?

Questions related to their idea of MAESTRO:

- What is your general impression of MAESTRO as it is presented to you?
- Do you think that a similar service could be useful in your business?
- Do you think your business could benefit from a service like this? How?
- Would you be willing to pay a fee to take advantage of the services offered by MAESTRO? How much?
- In what form? Monthly subscription? Access rights? Percentage commission of sales?
- What do you think are the mechanisms that should be put in place to make the platform a reliable and credible tool?



## 8.2 Results

### Omitech

Omitech is a company in operation since 1996. It has had different types of products and primarily works in the ICT field. Right now, it has a portfolio of cloud-based services. It has its own data-centre from which it provides its own e-mail solutions, virtual machines, perimeter security and other services. Recently, Omitech has diversified into social robotics, focusing on the part of software solutions and purchasing the hardware part on the market. Omitech is the exclusive distributor for the Sanbot Elf robot (see picture on the previous paragraph), a social robot that can be used in various fields and more precisely as a support device for the elderly for both monitoring and active aging. Omitech has internally developed an AI intelligence named Vivaldi that allows you to interact on the Android platform and develop a set of services for the older adults (e.g. reminders).

Omitech is interested in promoting robotics for the care of the elderly, following the predictions of this evolving new market.

For the robotics part there are still not many commercially recognized standards. For this reason, Omitech is thinking about creating its own standards to be promoted on the market.

To promote the commercialization of this new product Omitech mainly uses exhibitions (e.g. SMAU) and ICT related events related to innovation both in Italy and in Europe, and contacts derived from debates in meetings on the theme of innovation.

MAESTRO seems a good solution in its ability to provide guidance services within the various technical and system possibilities that can help patients' well-being (which is growing in demand).

Omitech felt that MAESTRO could be useful to promote new products. This would only be the case however when MAESTRO achieves critical mass for which it is recognized by many potential customers as a standard.

These tools are only Standards when the market recognizes them and then they are useful. The problem is to have the standard recognized (as a standard by many).

If this were the case, Omitech would also be willing to pay a cost that depends on the added value obtained through the certification, and also on the number of potential customers MAESTRO would allow to reach.

The most attractive model would be a certification cost plus possibly periodic subscription for the maintenance of the proposed solution within the platform.

In fact, at the beginning there could be a relatively high certification cost, after which a lower periodic subscription form would be needed.

The MAESTRO tool could provide a double advantage: if I am a user who needs a solution and I do not find the solution that is considered the best one on MAESTRO portal, then I begin to doubt about the platform. There should be a virtuous circle for



which the best products on the market are certainly present on the MAESTRO platform while the products are on the platform if are those certified by MAESTRO.

### **Smartex**

Smartex is a small company which develops monitoring systems based on physiological sensors embedded in clothes. Sensors for monitoring of cardiac activity, electromyography, breath rhythm, position, etc. are supposed to better gather information when embedded in fabric. Additionally, invasiveness is drastically reduced and comfort for the person increases. Beside single devices, Smartex also offers services for integrating and interpreting data gathered from different sources such as different sensors which require higher level of reasoning in order to extract high level patterns.

Smartex mostly works on research projects (mostly European projects) instead of selling commercial products. In research projects they usually focus their efforts in increasing the monitoring accuracy of their sensors, and on data (from different sensors) integration in order to abstract higher level information.

For this reason, they are particularly interested on the certification capability offered by MAESTRO. Nevertheless, they pointed out the importance of involving the manufacturers in the certification process. They are used to rely on independent certification entities both for electronic components and for fabric components. Stating that this is a usual practice, they approved the role of MAESTRO as certification entity, even if they admitted the importance to conceive very carefully how MAESTRO and MAESTRO evaluators should operate in this process.

The idea to rely on independent evaluators with no major knowledge on the specific device to be assessed is not considered as a good choice. There is a risk for the manufacturer to obtain a negative evaluation of its device which turns out on a bad investment. On the contrary, they would consider the role MAESTRO evaluators in the development process of a device. The recommendation was for a type of co-design process during which the evaluators could perform some standard tests in order to gather feedback for refinement.

Considering their prevalent interest in research, they usually promote themselves by attending conferences, workshops, exhibitions, or by empowering their website. MAESTRO could be a help by expanding the market to the research one, possibly research on AAL.

According to Smartex, payment for MAESTRO services is irrelevant whenever an advantage does exist. Of course, the more secure form is represented by a percentage on sales, but if the platform is able to reach a wide catchment area, then a payment becomes worthy.

The important thing is to ensure the reliability of information retrieved on the platform (for this reason both solutions assessment and users/solutions profiling should be reliable). Additionally, more the users use MAESTRO, more reliable it is perceived by users themselves.





At the beginning, getting in contact with senior-related associations could somehow help in making the platform growing faster.

## **KELL**

Over the years Kell has consolidated its leadership in the market for the development of telemedicine systems, enhancing ICT technological innovations that can also be used in the healthcare sector to make the quality of health processes more efficient and effective, in different contexts such as prevention, emergency, care, maintenance of well-being - wellness, family support, clinical and epidemiological studies. Together with some of the major Italian companies in the sector, Kell has developed one of the major telemedicine programs, some of which are based on satellite telecommunications for mobile telemedicine.

During these initiatives, Kell developed a set of software modules that allow the integration of the various electronic health worlds, encouraging the circulation of data in electronic format and has collaborated with various Regions and some of the public and private health structures on the Italian territory. Kell is therefore a producer of platforms that can integrate different devices to deliver services. In fact, for telemedicine services the real problem is not technology but rather services. There are technologies, devices, but the critical point is also who provides the services.

After recording the info from the devices, the problem is to understand what to do with the data. For this reason, Kell creates platforms that can be used by service providers. They built a platform called 2Care for the homecare of chronic diseases but also for prevention and well-being. The National Health Service and cooperatives can be KELL's clients for home care as well as social assistance. Abroad where there is a private health care market for this type of platform the promotion of this kind of solution is simpler.

The problem then is also to understand how to sell complete platforms, service aggregators and not only single devices.

The service provider seems to be another among the MAESTRO's possible stakeholders.

Generally when monitoring fragile people, a single service is not enough, but a set of services is usually needed. The profiling of the single user is useful, but the aggregator of services is something that cannot be ignored. Not only the technology itself is important, but also the services: the technology alone could not be enough. An example of this is the case of service robots. The idea should be not only that of selling the robot itself but rather the service associated with the robot.

MAESTRO could be useful to KELL because it would allow them to look for the devices that serve the service demand, ensuring a more effective search. MAESTRO could facilitate the search for products thanks to its categorization functionality. A user of MAESTRO could in fact be a supplement that, in addition to looking for products, could also promote its integration solution on the MAESTRO platform. The



platform could also be put on the market to reach for example the National Health Service or similar companies that can buy the KELL solution.

Kell uses ISO9001 and 13485 certifications as system certification while the platform is going to be classified as a class 2 medical device.

The current means of promoting the platform is a network of direct commercial actors. The idea of the system is appreciated with reference to the ability to be more specific in finding more specific products for the demand.

MAESTRO is a market place where to look for devices to be integrated into the platform and to promote the KELL platform to the users (service providers, National Services and consumers).

KELL would be willing to pay a fee for MAESTRO's services to the extent that this has an audience, with many actors. The crucial part is to ensure a critical mass. In the case of KELL the percentage of sales as payment model would not work. A monthly or annual payment would make more sense.

MAESTRO is oriented to different markets so it is difficult to understand how it could assert itself on the market. Probably the starting point should be to insert many products / services, without being paid at the beginning by producers / service providers doing revenue on banners and ads, on advertising and once the name is affirmed, then services of added value could be charged. Thus, the public part should be given for free while paying for example the certification of experts. The same producers initially may pay for advertising and then the most elaborate services could be paid.

Another way to make it a reference in the market is to foster its adoption by "decision makers" and then to promote it through influential stakeholders in the sectors (doctors, experts) i.e. people influential in the sector.

### 8.3 Conclusive Remarks from interviews in Italy

Generally speaking, MAESTRO has been seen as a valuable solution for manufacturers and service providers. Few interesting remarks emerged during these interviews. There are as follows.

First, it clearly emerged how a single stakeholder can cover different roles within MAESTRO. For example, for those companies who develop integrated systems for AAL, the platform can easily represent both a showcase for selling their own integrated service, and a place where to find single components to put together for building up integrated systems.

Additionally, clearly emerged the importance to make MAESTRO a reliable platform, and one of the most important ways for doing this is to populate the platform both with devices/solutions and, most importantly, users. In order to achieve this goal, a suggested option has been to get in contact with senior-oriented associations and foresee an initial phase with free subscription for manufacturers with a fee in case they ask for a MAESTRO certification.

With regard to the possibility of getting a MAESTRO certification, the participants strongly recommended to include it in a process of co-design where the manufacturer can be involved.

## 9 Conclusion

It has been clear all the way through the diverse interactions engaged in Ireland, Luxembourg, Switzerland and Italy, to get feedback from the participants of the various national Go to Market workshops and commercial interviews, that everyone supported the hypothesis underpinning the MAESTRO project:

- 1) there is lack of impartial information and advice in the connected device market to support wellbeing for older people;
- 2) this gap needs to be filled and MAESTRO, as it has been designed and presented to these groups of stakeholders across four countries, was seen as potentially and positively plugging into this gap;
- 3) moreover, the interviewees could all see the commercial value of the MAESTRO proposition, and whilst there are some variations in how those participants could see themselves interact with the MAESTRO platform, they would all pay something to get that service.

More than just the the overwhelming response was that there is a need for MAESTRO., we should stress here that manufacturers would gladly pay to engage with a consultative service which gave them a recognised accreditation and better, a recognised, impartial route to market. Commissioners, as for themselves, really need guidance in this market, as they are unsure about what AAL products and services are available to support older people; moreover, they are unsure whether the products they can find are of good quality, reliable and actually meet the usage capabilities and needs of their clients.

There were varying responses from the manufacturers in terms of a pricing model for a MAESTRO engagement and a definite view from commissioners on how they would not pay to engage, despite the fact they would value MAESTRO. This was mirrored in all four countries, with a fee for consultative assessment and certification looking like it would be most acceptable across all countries. This model may need to incorporate a period of time where this accreditation is free or offered at a discounted rate until such time as critical mass is achieved, after which time, the fee could go up quite substantially. There should also be a different pricing structure depending on the size of the organisation.

The major caveat to this however, is two-fold; firstly, this issue of critical mass or a recognised and trusted brand behind this accreditation in order to be attractive enough to pay for the accreditation. Secondly, the MAESTRO platform needs to navigate the issue of impartiality and trust very carefully – this issue featured heavily in the Swiss workshop where the issue of ‘playing for both teams’ was highlighted as being a potential issue.

In all countries, the workshops identified that ultimately the market resides within the business to business sector, i.e. it is the manufacturers who will ultimately pay for MAESTRO services, though they may not be the end customers. Also, in Italy, a marketplace proposition was discussed, which was interesting, for service providers to discover components or devices for their services. In Switzerland, Coherent Streams



have used the workshop as a springboard to further engagement, building on the lessons of the workshops to adapt and transform the Maestro best selling proposal accordingly (see WP1 deliverables). Such was the interest of the participants in the MAESTRO proposition.

## 10 Summary

The Go to Market workshops and interviews were valuable in providing a solid steer in the business case development and ultimately the direction that the potential commercialisation plan for MAESTRO Inc. could take.

There were similar issues raised in all four countries and similar pricing models were deemed attractive. Some of the key issues raised include:

- MAESTRO, as presented to the workshop/interview participants, is attractive to both manufacturers and commissioners however in order to be successful it needs to address the following points.
- There is a need to ensure that MAESTRO evaluations are seen to be impartial in order to become trustworthy.
- There would have to be a recognised brand/critical mass of assessments, products and users behind MAESTRO accreditation in order for manufacturers to pay to access MAESTRO services (consultation and accreditation or just audit and accreditation).
- The MAESTRO team would have to ensure they stay ahead of the market (new devices, apps etc.) which was seen as being difficult to achieve.
- A consultation or co-design process with older people and manufacturers in the assessment/accreditation would be desirable across all markets.

There is still a lot to consider in terms of market entry and branding. However it is clear from both the pilots and Go to Market engagements that there is a strong interest in MAESTRO which could, if tuned launched effectively, be commercially successful.

## 11 Approval of Deliverable

<p>1. <u>DISTRIBUTION OF THE DELIVERABLE</u></p> <p>WORK PACKAGE TITLE:  <b>WP1 – Business Exploitation and Dissemination</b></p> <p>DELIVERABLE NAME:  <b>D1.4M39 – Workshop Executive Summary</b></p> <p>DELIVERABLE DISTRIBUTED TO ALL PARTNERS VIA:  <input checked="" type="checkbox"/> email  <input checked="" type="checkbox"/> DMS: Document Management System (indicate location):  <a href="https://3.basecamp.com/3122822/projects/293706">https://3.basecamp.com/3122822/projects/293706</a></p>
<p>2. <u>APPROVAL OF THE DELIVERABLE</u></p> <p>ORGANIZATION NAME:</p> <p>REPRESENTATIVE NAME:</p> <p>DATE OF THE APPROVED REVIEW:  <input type="checkbox"/> APPROVED  <input type="checkbox"/> NOT APPROVED</p> <p>COMMENTS:</p>